

REMARKS

The Applicants are filing this Amendment and Response in response to an Official Action dated April 23, 2007. At the time of the Official Action, claims 1-21 were pending. In this Response and Amendment, no claims are canceled or added. Accordingly, claims 1-21 remain currently pending. Claims 16 and 18 are amended.

Summary of Objections and Rejections

In the Office Action, the Examiner indicated that a previously submitted information disclosure statement (IDS) fails to comply with 37 C.F.R § 1.98(a)(2). Further, the Examiner objected to the specification due to certain informalities. The Examiner further objected to claims 16 and 18 due to certain informalities. In addition, claims 1-21 were rejected under 35 U.S.C. § 102(e) as being anticipated by US 2006/019699 to Kagan et al., ("the Kagan reference"). Each of these objections and rejections are addressed in detail below.

Information Disclosure Statement

In the Office Action, the Examiner indicated that a copy of the EPO patent listed on the previously submitted IDS was not supplied to the Office. Accordingly, Applicants have enclosed herewith a legible copy of foreign patent EP 0757318A2 cited in the Information Disclosure Statement. The Applicants apologize for this oversight.

Specification

With respect to the objection to the specification, the Examiner noted “the use of acronyms (e.g. CPU, RDMA, etc.) throughout the specification without first including a description in plain text, as required.” Applicants traverse the objection.

The Applicants direct the Examiner to the specification, paragraph 10, where the term “RDMA” is first introduced and defined as a “Remote Direct Memory Access.” Applicants further direct the Examiner to paragraph 10 of the specification, where the term “CPU” is defined as a “central processing unit.” Applicants further submit that contrary to the Examiner’s statement, all acronyms in the specification are first introduced in plain text.

With regard to the acronym “CQE,” as being defined in the specification as “completion queue element” and as a “completion queue entry,” Applicants submit that there is no substantive distinction between those two terms. Accordingly, no correction is required to the specification. For at least these reasons, Applicants request the Examiner to withdraw the objection to the specification.

Claim Objections

With regard to the objection to claims 16 and 18, Applicants have amended those claims so as to overcome the objection made by the Examiner due to certain informalities. Withdrawal of the objection is respectfully requested.

The Rejection Under 35 U.S.C. § 102(e)

With respect to the rejection of independent claims 1, 8 and 15 under Section 102

based on the Kagan reference, the Examiner stated:

Claim 1 Kagan discloses an apparatus comprising:

- a. plurality of queue handlers associated with a communication device (page 4, paragraph 41);
 - b. queue handler associated with a process (page 4, paragraph 43); and
 - c. each queue associated with one of the plurality of queue handlers (page 4, paragraphs 42 & 43).

Claim 8: Kagan discloses a network comprising:

- a. plurality of systems (page 1, paragraph 2);
 - b. switch network that connects the systems for communication (page 1, paragraph 4);
 - c. communication device having a plurality of queues (page 1, paragraph 4);
 - d. handlers associated with the communication device (page 4, paragraph 41);
 - e. each handler associated with one of the processes (page 4, paragraph 43); and
 - f. each handler associated with one of the plurality of queues (page 4, paragraphs 42 & 43).

Claim 15: Kagan discloses a method comprising:

- a. creating a plurality of queues on a communication device (page 1, paragraph 4);
 - b. plurality of queues associated with one of the queue handlers (page 4, paragraphs 42 & 43);
 - c. queue handlers associated with the communication device (page 4, paragraph 41);
 - d. queue handlers are associated with a process (page 4, paragraph 43);
 - e. placing queue entry on one of the queues (page 2, paragraph 12 & pages 7 & 8, paragraph 90);
 - f. invoking one of the queue handlers associated with one of the queues (page 6, paragraph 69); and
 - g. notifying one of the processes associated with the queue handler (page 5, paragraphs 70 & 71).

Office Action, pp. 4-5.

Legal Precedent

The Applicants respectfully traverse the rejection. Anticipation under section 102 can be found only if a single reference shows exactly what is claimed. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 U.S.P.Q. 773 (Fed. Cir. 1985). For a prior art reference to anticipate under section 102, every element of the claimed invention must be identically shown in a single reference. *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). In order to maintain a proper rejection under section 102, a single reference must teach each and every element or step of the rejected claim, else the reference falls under section 103. *Atlas Powder v. E.I. du Pont*, 750 F.2d 1569 (Fed. Cir. 1984). Accordingly, the Applicants need only point to a single element not found in the cited reference to demonstrate that the cited reference fails to anticipate the claimed subject matter. The prior art reference also must show the *identical* invention “*in as complete detail as contained in the ... claim*” to support a *prima facie* case of anticipation. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 U.S.P.Q. 2d 1913, 1920 (Fed. Cir. 1989).

The Applicants assert that the Kagan reference fails to disclose each of the recited features of claims 1, 8 and 15, much less the part-to-part relationship between them. Examples of the deficiencies of the Kagan reference will be discussed in detail below. Specifically, the Applicants will point out some of the inappropriate correlations drawn by the Examiner between the recited features of claims 1, 8 and 15 and the features discussed in the Kagan reference, thus highlighting the deficiencies of the Kagan reference.

Claim 1, for example, recites “a plurality of completion queue handlers associated with a communication device,” and “at least one *completion queue* associated with each one of the plurality of *completion queue handlers*.” In the Office Action, the Examiner attempted to address this claim feature by suggesting that a corresponding feature in the Kagan reference is described at paragraphs 42 and 43 of the Kagan reference. However, the cited portion of the Kagan reference merely relates to a process in which “transport services include queue pairs.” *See*, Kagan paragraph 42. That is, the queue pairs disclosed in those portions of the Kagan reference pointed out by the Examiner, are not the claimed completion queues. As appreciated by those having ordinary skill in the art, queue pairs are comprised of a send queue (SQ) and a receive queue (RQ), both of which may be used to facilitate transfer of data between computer nodes. *See also*, Application, paragraph 2. In contrast, completion queues are adapted to store information regarding the sending and receiving status of items on the send and receive queues, respectively. *See also*, Application, paragraph 21. While the claimed completion queues may generally be associated with the queue pairs, i.e., SQ and RQ, those elements are distinct and are not properly equated to each other.

Further, even if those portions of the Kagan reference cited above by the Examiner are assumed for the sake of argument to disclose completion queues, the Kagan reference clearly does not disclose completion queue handlers or elements that could be construed as such. Applicants’ specification clearly states that “the CQ handlers 216 and 230 may comprise the completion notification mechanism for a completed operation or request that has been posted to the CQ 214 or 228 for notification of the associated process.” Application, paragraph 21. Again, while the Applicants maintain Kagan does not disclose CQ handlers, there are no

teachings in the Kagan reference that would lead one skilled in the art to conclude that the queue pairs disclosed in the Kagan reference are associated with CQ handlers, much less CQ handlers having the above-mentioned attributes. In light of the arguments presented above, Applicants assert that the Kagan reference clearly does not anticipate independent claim 1.

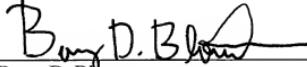
Independent claims 8, and 15 recite subject matter similar to that recited by independent claim 1. Specifically, those claims recite “completion queues” and “completion queue handlers.” The rejection of independent claims 8 and 15 is based on those portions of the Kagan reference used by the Examiner to reject independent claim 1. Again, Applicants respectfully submit that the Examiner’s interpretation of the prior art reference as applied to the claimed subject matter is flawed by the same reasoning stated above with regard to the rejection of independent claim 1. That is, Kagan clearly fails to disclose completion queues and/or completion queue handlers. Therefore, the Kagan reference does not anticipate independent claims 8 and 15.

For at least these reasons, the Applicants respectfully submit that independent claims 1, 8 and 15 (as well as the claims dependent thereon) are not anticipated by Kagan. Accordingly, the Applicants respectfully request the withdrawal of the rejection of claims 1-21 under Section 102 based on Kagan.

Conclusion

In view of the remarks set forth above, the Applicants respectfully request reconsideration of the Examiner's rejections and allowance of all pending claims 1-21. If the Examiner believes that a telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,



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